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Learning and Growing

The GEOINT Symposium Continues to Thrive in Trying Times

USGIF President Keith Masback took a few moments before the GEOINT 2012 Symposium officially kicked off to discuss what's exciting about this year's symposium, current budget pressures, and his vision for the future.

Q: Can you describe this year's theme for the GEOINT Symposium?

A: We received a number of suggestions for this year's theme that revolved around austerity and the daunting economic environment. We felt the real focus should be less about what we don't have, and more on what has set America apart for its entire history: innovation. When faced with adversity in the past, Americans have distinguished themselves through creativity and imagination. We want to make sure all of our participants walk away from this week energized with an innovative spirit, and empowered by the knowledge gained and the relationships formed and renewed here in Orlando.

see *Learning and Growing*, p. 6



GEOINT FOREWORD

Pre-Symposium Event Focuses on Innovators Expanding Boundaries



PHOTO © PINAR OZGER

Jeff Jonas, IBM Fellow

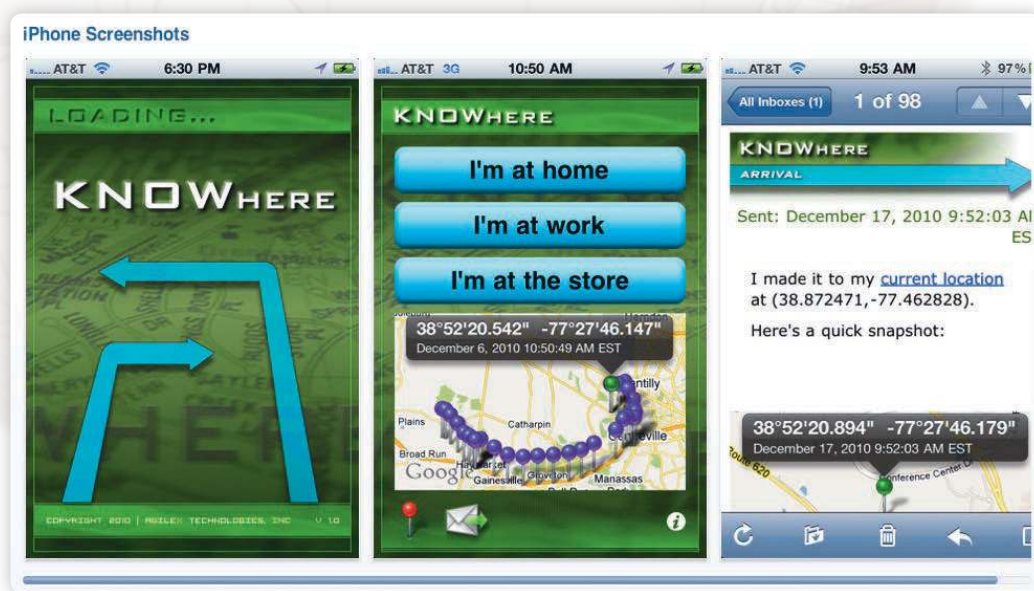
The GEOINT Foreword pre-symposium event begins this morning with a daylong offering of panels and discussions from a broad range of innovators and practitioners from across the GEOINT Community.

Transformational thinkers, such as IBM fellow Jeff Jonas and panels of academic and industry experts, will discuss a range of subjects, including human geography, gaming for GEOINT, lessons from the Arab Spring, and open source software.

"GEOINT Foreword is our exciting pre-conference event," said Dr. Jim Ellsworth, USGIF's chief performance officer and an organizer of this year's event. "It's devoted to professional education and interactions for GEOINT practitioners and innovators, as well as exploring themes and issues shaping the future of our profession. We developed it as a complement to the main GEOINT Symposium, which tends to emphasize executive leadership and policy perspectives."

see *GEOINT Foreword*, p. 8

FROM THE



First-time exhibitor Agilex will demo its new app, KNOWhere, at Booth 1031.

APPS & ANALYTICS

Newcomer Agilex Focuses on Big Data and Location-Based Technology

Searching by keyword isn't very useful when you don't yet know the keywords to search by. Agilex (Booth 1031) will highlight its new analytics software, called Phanero, at the GEOINT 2012 Symposium. Phanero goes beyond keywords to extract intelligence from big data, then tag the intelligence and seek out conceptual relationships.

Phanero allows the user to focus on key questions rather than manually search documents, and it automatically maps these conceptual relationships. Designed to work with data analysis and visualization tools, Phanero also can process multi-terabyte-sized data sets.

Phanero is only one of several capabilities Agilex, a five-year-old company based in Chantilly, Va., plans to demonstrate at the GEOINT Symposium. The company will also feature biometric identification applications, as well as geospatial and emergency alert applications.

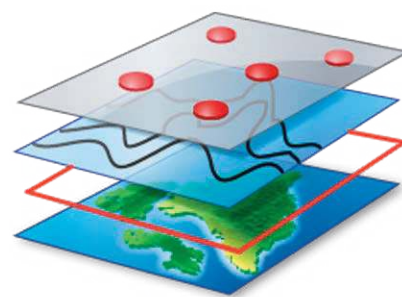
Another application, KNOWhere, just completed the proof-of-concept phase. KNOWhere is designed to let friends and family know where you are. Available for use on the iPhone, the app sends a preconfigured message of your whereabouts and the route you took to get to each location.

While it would seem most applicable to children and their parents, Agilex sees potential intelligence value in the app, in part because the user can control how much data to gather and with whom it is shared.

As a first-time GEOINT Symposium exhibitor, Agilex is eager to showcase its talented employees and dedication to the Intelligence Community, said spokesperson Kristin Kessler.

"GEOINT is the largest intelligence conference in the country, and we're putting a lot of our investment behind intelligence right now," Kessler said.

PIXIA Demonstrates High Performance, Scalable Data Access Solutions



With the DoD and the Intelligence Community both in need of solutions to manage the ever-expanding data deluge, PIXIA (Booth 522) will showcase its big data solutions for enhanced data capture, storage, search, sharing, and visualization at the GEOINT 2012 Symposium.

PIXIA will be focused on the theme of "Operational Excellence," and demonstrate how its solutions can be used in an operational setting, as well as how its data access technologies can be maximized in theater for the warfighter.

The company is focused on increased storage input/output, scalability, and interoperability to power data that can be accessed anywhere within a cloud environment. At the booth, PIXIA will showcase solutions for a variety of high-volume data problems facing the GEOINT community, such as wide-area surveillance, full-motion video, and LIDAR.

Booth visitors can witness demonstrations of PIXIA's HiPER LOOK, a data access solution used to catalog, organize, and share large volumes of geospatial data, as well as HiPER STARE, a solution for wide-area surveillance data within the DoD's most advanced ISR systems. The company will also showcase its HiPER WATCH data access solution used to catalog, organize, and share large volumes of full-motion video within the cloud.

FLOOR

EXHIBIT HALL HIGHLIGHTS



ON THE MOVE

GeoDigital Showcases Mobile Acquisition Platform

GeoDigital (Booth 711) will again showcase its Mobile Acquisition Platform, or MAP, which made a major splash at the GEOINT 2011 Symposium. Last year's attendees may recall the specially designed utility trailer with more than 5,500 cubic feet of storage, maintenance, and operational space available to support a five-person acquisition and data processing team.

Enabling near real-time geospatial data delivery and situational awareness in the field, MAP is a mobile, airborne data acquisition and processing center—the first of its kind. MAP can travel more than 600 miles nonstop in rapid response to establish local acquisition.

The trailer also carries an MD500 helicopter and all of the systems required to remotely process LIDAR and imagery anywhere in North America—ideal for supporting remote incident management, emergency response, disaster relief, and wildfire mitigation.

At the booth, GeoDigital will share how its resources, expertise, and experience acquiring, processing, and delivering geospatial information can meet customer needs. MAP will be on display with the outdoor exhibits directly outside the exhibit hall.

“I never perfected an invention that I did not think about in terms of the service it might give others ... I find out what the world needs, then I proceed to invent.”

—Thomas Edison



MANAGING BIG DATA

SGI Offers Quick Data Ingestion and Easy Management

SGI (Booth 1227) will highlight a variety of GEOINT processing capabilities, including data discovery and retrieval, multi-sensor data fusion, WAN storage, and persistent analytics with more than 10,000 Hadoop nodes deployed.

The company tackles big data streams with ingest rates of up to four terabytes per second per single system—the equivalent of swallowing the entire Library of Congress in three to four seconds.

For both needle-in-the-haystack analysis with Hadoop scale-out systems, as well as understanding complex relationships using graphing algorithms on scale-up systems, SGI delivers open, standards-based systems as a single environment using SGI Management Center software.

Customers have used the company's hierarchical storage management software for more than 20 years, and SGI's big data solutions are proven as part of the Army's Distributed Common Ground System (DCGS) and in a number of government intelligence projects.



MORE TO SEE!

Outdoor Displays Offer Up-Close Look at GEOINT Capabilities

The showroom floor at GEOINT 2012 will be packed with exhibits of every sort, but the outdoor displays offer something extra.

“We have some really exciting things there,” said Jeff Ley, director of business development, membership and exhibitions for USGIF, which puts on the GEOINT Symposium.

Celebrating 20 years as the DoD’s only deployable commercial satellite ground station, The Air Force Eagle Vision will be on display, which receives unclassified imagery from satellites for use in defense and homeland security operations.

IBM will showcase its Portable Modular Data Center, which can operate in theater and in harsh climates. Systems integrator World Wide Technology will display its data center and security tools, as well as other technologies.

GeoDigital International, a Canadian firm with operations across North America that specializes in LIDAR and digital imaging, will display a truck-hauled helicopter as an example of its flexibility in using LIDAR to provide actionable geospatial intelligence.

Flexibility is also the catchphrase for the U.S. Army North’s Emer-



IBM will showcase its Portable Modular Data Center, which can be inserted into a theater and operate in harsh climates.

gency Response Vehicle—a Chevrolet 2500 Series Suburban that has been gutted to house communications capabilities. It can be connected to television networks and satellites in 10-15 minutes to offer quick situational awareness in an emergency situation.

To see all this and more, don’t forget to check out the outdoor displays, which can be accessed through the back of exhibit hall F.

INTEROPERABILITY TECH TALKS

Innovation Pavilion Offers Lessons Learned

Have you battled through developing and implementing interoperable services and solutions? Do you want to hear lessons learned, best practices, or just tips and tricks for standing up capabilities and functioning in an interoperable environment? Learn from other’s experience and knowledge by attending the Interoperability Tech Talks.

The Tech Talks will take place Tuesday through Thursday at the Innovation Pavilion (Booth 2003) in the exhibit hall. The Tech Talks are also a great opportunity for exhibitors who might not have time to attend the keynote addresses, panel discussions, or breakout sessions, to gather knowledge without leaving the exhibit hall.

Tech Talks topics are wide ranging, including LIDAR, open source software, human geography, integration, standards, and more. Check out pages 22-23 in your GEOINT 2012 Symposium Event Guide for more information.



EXPLORING THE GAYLORD PALMS

Many Diverse Attractions Under One Roof

The Gaylord Palms has something for everyone. After the GEOINT 2012 Symposium events have wrapped up for the day, be sure to take the time to kick back and check out the many opportunities the Gaylord offers for dining, relaxation, and exploration.

DINING

Enjoy specialty sushi and eclectic handcrafted drinks at Sora, or sample the seasonal menu inspired by European cuisine at Villa de Flora. Black Angus steaks, artisanal cheeses, and an award-winning wine list can be found at Old Hickory Steakhouse. At Sunset Sam's, a Key West Grill, step aboard a 60-foot sailboat for a creative fusion of Floridian and Caribbean favorites. Or for the sports enthusiast, Wreckers Sports Bar features more than 50 HDTVs and a two-story video wall.



Old Hickory Steakhouse



South Beach adult-only pool

POOLS

Traveling with the family? The Gaylord's new Everglades-inspired Cypress Springs Family Fun Water Park is a multi-level water playground with four water slides, an active lagoon, a plunge pool, and water basketball area. For a more tranquil setting, visit the South Beach adult-only pool, lined with tropical palms and with cozy poolside cabanas available for reservations.

BEST OF FLORIDA LIVE!

Don't miss the opportunity to discover the best of Florida throughout the hotel's many atriums. The 161-gallon Key West lagoon is home to a variety of marine species, including mangrove snappers, redfish, snook, stingrays, and tarpon. At Gator Springs, you can observe 15 juvenile alligators and 30 native species turtles. In Sawgrass Place, stop by to witness two popular exhibits featuring non-venomous snakes and a family of baby alligators. Other attractions include sand sculptures in the Key West atrium, aquatic life in the scenic indoor waterways, and much more.



Key West atrium



Without change there is no innovation, creativity, or incentive for improvement. Those who initiate change will have a better opportunity to manage the change that is inevitable."

—William Pollard, Physicist

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LEARNING AND GROWING CONTINUED

Q: *What about this year's agenda are you most excited for?*

A: It's difficult for me to identify any one favorite part of the week's events. The phenomenal thing about the GEOINT Symposium is the breadth of offerings, from keynotes by the most senior people in our profession, to topical breakout sessions, to focused technical exchanges and networking opportunities. That said, the exhibit hall never fails to capture my attention and imagination. I could spend every minute of the event in the exhibit hall and never get to view all the demos I'd like to see or talk to all the people I'd like to engage. The exhibit hall is like a bazaar for GEOINT junkies—every year I regret not being able to spend more time there.

Q: *What new features at this year's Symposium should attendees be on the lookout for?*

A: First, we put a lot of energy into our pre-symposium sessions, now called GEOINT Foreword. We've used feedback from the past two years to drive improvements into this program, and we're proud of how it continues to evolve. Second, we've continued to expand upon technical presentations in the exhibit hall with what this year is called the Innovation Pavilion. This has become a very popular aspect of the symposium, especially for the more junior folks who don't have many chances to get out of the exhibit hall. Our idea is to add more value to their time with us by ensuring the opportunity to take in dynamic presentations right there, within the exhibit hall.

Q: *Can you describe how USGIF has addressed the recent stigma surrounding conferences as a result of budget pressures and spending scandals?*

A: We at USGIF are obviously sensitive to the negative light in which large government-related gatherings are being painted. USGIF and the GEOINT Symposium were developed from the outset to build a community around a newly created intelligence discipline. I would argue that by any measure, we have been successful, and that our events and gatherings have been an important part of that success. Our 230 member companies and organizations support USGIF as a non-profit educational foundation, and recognize that we aspire to a broad set of goals related to training, education, and technological innovation. I am confident that we are responsible stewards of our resources and that participation in our events benefits each attendee, the organizations where they work, and our national security.

Q: *Along those same lines, what is USGIF doing to alleviate some of the budget pressure facing federal and military attendees?*

A: We understand the reality of today's fiscal environment. We're not a for-profit events company; we're a non-profit educational foundation. So, we are always looking for ways to enhance the experience for participants in all of our events, and do so with the intent to keep costs under control. For government and military attendees, we have reduced this year's registration costs 30% from last year's already reduced rates. Our focus is to maximize the professional value of attendance, and the return on investment for every exhibitor and sponsor. It's an honor for USGIF to serve the defense, intelligence, and homeland security communi-

ties—and we never forget that. And for those who are unable to attend, you can view all symposium content in high-definition streamed to a desktop or mobile device at geointv.com in near real time.

Q: *Are budget constraints expected to have an impact on the number of attendees or exhibitors this year?*

A: We will likely have a record number of exhibitors at this year's GEOINT Symposium. Given the challenging economic times and tough forecasts for government spending, this is a testament to the inherent value of being a part of the exhibit hall at this event. Each year, we are somewhat surprised by the number of people that attend the GEOINT Symposium. Even as you hear about other events losing attendees, USGIF continues to experience an increase at our events. Will we see a record number of attendees in 2012? I don't know. I said we wouldn't last year, and I was wrong. Companies and organizations are making really tough choices right now, and their strong and growing interest in being an integral part of the GEOINT Symposium tells me that we are doing something right. We appreciate their confidence in our production of the event, and we intend to deliver as we always have.

Q: *What is the geographic significance of hosting GEOINT 2012 in Orlando?*

A: Orlando is the nexus for modeling and simulation in the United States. There is a powerful synergy here among industry, academia, and the government. Representing the underlying terrain in all its relevant layers in various systems remains a tremendous challenge for the M&S community. USGIF has established a Modeling and Simulation Working Group to foster a discussion with the hope that we will significantly contribute to progress in this area. We've begun to reach out to the entirety of the extended M&S enterprise, and I am hopeful that having this year's GEOINT Symposium here in Orlando will be another big step forward with regard to our commitment to this critically important topic.

Q: *What is your vision for the future of the GEOINT Symposium?*

A: Well, the symposium's immediate future will be focused on appropriately celebrating the 10th anniversary of this remarkable event next year in Tampa. We've already been to Tampa for planning trips, and we're excited about the possibilities that this great venue holds for our participants. The co-location with both CENTCOM and SOCOM will provide for some unique interactions as well. We remain committed to ensuring that all USGIF events and programs, including the GEOINT Symposium, remain current and relevant. No one in the government or industry has any 'extra' time or money, and in order for them to invest in our events and programs, there must be an unquestionable return on that investment. We also remain committed to carrying out the Foundation's mission to: Build the Community, Advance the Tradecraft, and Accelerate Innovation. Everything we do revolves around those three simple statements. Future GEOINT Symposia will continue to be characterized by the right mix of training, education, professional development, high-level policy discussions, and deep-dives into emerging technologies. ■

MISSION DATA ANALYTICS

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GEOINT FOREWORD CONTINUED



Ellsworth opens the event with a welcome at 8 a.m. in the Gaylord Palms' Sun Ballroom A-B, followed by a keynote address at 8:15 a.m. by Ted Cope, director of basic and applied research at the National Geospatial-Intelligence Agency (NGA).

"GEOINT Foreword seeks perspectives from the broader geospatial community, including academics and other professionals from the civilian side," said Dr. R. Maxwell Baber, USGIF's director of academic programs, who also assisted with organizing today's events.

"The GEOINT Community is tackling many of the same science and technology challenges as the civilian community," Baber added. "Including civilian geospatial perspectives in GEOINT Foreword provides an opportunity for cross-fertilization. In this way, our goal is to create a thought-provoking event that stimulates innovation and advances the GEOINT tradecraft."

GEOINT Foreword concludes with GEOINTstant, an hour of fast-paced, 5-minute lightning talks on innovative technologies and emerging trends.

Commoditization of Geospatial Capabilities with Open Source Software

This year features two panels on current and upcoming open source technologies. These sessions will review the state of open source software (OSS) and discuss how it is bringing capabilities to the warfighter and the GEOINT workforce.

"Both panels will explore how to do more with less," said John Scott, a senior systems engineer and open tech lead with RadiantBlue Technologies. "You've got sequestration coming, even without that you've still got big cuts coming in budgets, and people are looking at ways to save money. Use of open source software has shown in the private sector to be a two-fold thing: it helps you save money and it helps you regain control to better understand your enterprise."

In addition to cost savings, Scott said open source software can facilitate efficiency.

"It's a really good tactical way to commoditize technology to save money, as well as infrastructure to increase capabilities faster—increase speed of development, deployment, and lower the cost. We need more bang for our buck over time. [Open source] is turning into a strategy to do that," he said.

Open Source Software: Increasing Access and Decreasing Costs

This panel tackles some of the tactical uses of open source software both inside private industry and inside the GEOINT domain. With agency representatives from NSA to the Corps of Engineers to NGA, this session will detail some of the practical uses of OSS and look at how adopting an open strategy can better meet the needs of customers while addressing the realities of having to do more with less funds.

"Everybody [on the panel] has a mission so they'll be talking about how they use open source, what the value of it is, the direction that it's going, what they've seen and what they haven't seen," said Scott. A review of the benefits, pitfalls, and various military use cases for OSS will also be presented.

Open Source Software Can't Do Everything...Yet

OSS has become a frontline component inside key military capabilities. OSS isn't doing everything yet, but it is slowly commoditizing key strategic parts of geospatial infrastructure, from operating systems to databases to applications. In this session, key government program managers will discuss where and how they see OSS moving to solve warfighter needs, as well as assess the gaps in OSS investment and capabilities.

"The panelists represent a good mix of joint forces—people who can talk about the value of what they see as open source," said Scott. "We'll lay out the pros and cons of what open source is, where the value is, from a strategic enterprise level."

We never thought of social media as a means to start a revolution. That was a big eye-opener. — GEOINT Foreword session co-moderator Susan Kalweit, Principal, Booz Allen Hamilton

Focus on Human Geography

Human Geography will be the subject of two panels during GEOINT Foreword. The focus of these panels will be about collecting, aggregating, and structuring data to understand socio-cultural behavior at the policy, defense, and development levels.

“Events focused on Human Geography are particularly beneficial to understanding how to collaborate methodologies and tradecraft development across distinct communities of interest,” said Julia Bowers, Courage Services, Defenses Program Director and Human Geography Lead. “The GEOINT Symposium is an amazing forum to have industry, academia, and government come together to explore and discuss existing challenges and new trends that we’re seeing in the geospatial arena. With such diverse attendance, the opportunities are endless in what could be shown and discussed.”

Human Geography Data Collection

Can the Human Geography data collection process be streamlined and easily trained? This panel will provide a snapshot of both proven and evolving data collection techniques through mobile devices. Panelists will address how the data can be collected and loaded from anywhere, anytime. In addition, panel experts will discuss data integrity backed by proven theory and grounded in unique case studies.

Human Geography Data Storage

The research, analytic, and operations communities have been searching for ways to efficiently and effectively access human geography data. To fully understand the nature of any data stored spatially, it is important to understand the relationship between the stored data and the real world it depicts. Data storage is not a one-size-fits-all solution, but a complex interwoven tapestry composed of theory, technology, innovation, and lessons learned. This session brings together a diverse set of individuals who address components of storing Human Geography information, presenting a series of challenges for the audience to grapple with how to further innovate, extend existing platforms, and learn from the past.

Gaming Technologies for GEOINT

Forward thinkers and practitioners across academia, industry, and government will discuss the innovative uses of gaming technologies in GEOINT. The goal of this session is to broaden awareness beyond what is conjured to mind by the word “gaming” and to shine a light on the wide range of applications to national security and intelligence activities, said Mike Campanelli, a senior systems engineer with RadiantBlue Technologies.

“We are excited for this year’s session as I believe it is the first year we have a session exploring the role of game technology,” he said.

This session will address technical and research programs associated with the use of gaming technologies and the potential improvements and changes to the intelligence process in government, developer, and academic contexts.

“I am personally excited because it is also an attractive topic for our young professionals,” said Campanelli, who wrote an article in

The YPG Datum last month that introduced young professionals to ways that gaming technologies could be, and are being used in the GEOINT world. “Our industry needs young and innovative minds and this is just the topic to get their minds in gear and to think about where our profession should be well into the future.”

GEOINT Lessons Learned from the Arab Spring

An assembled panel of experts from government, academia, and industry will discuss GEOINT issues related to the Arab Spring. Each expert selected has collected data or developed methods for GEOINT analysis on some aspect of the Arab Spring, the Middle East, or North Africa. Part of the discussion will focus on the state of the art in the tradecraft, recent research, and identifying the gaps and needs for future research.

Questions and comments are encouraged from the audience. The moderators and panelists hope to plant the seeds for a broader discussion—to encourage further research collaboration and stimulate new ideas and approaches to advance GEOINT for the prediction of political conflicts and uprising, and more broadly sociopolitical dynamics across the globe. ■



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A STRONG SYNERGY

Collaboration Grows
Between GEOINT and M&S
Communities

Not only is Orlando the host city for the GEOINT 2012 Symposium, but it is also the center of the modeling and simulation universe. Orlando is home to both the Army and Navy's major training and simulation offices, as well as to numerous defense contractors specializing in the technology.

Although there have long been synergies between the GEOINT and M&S communities, the United States Geospatial Intelligence Foundation (USGIF) aims to shorten the bridge between the two, and sees hosting the symposium in Orlando as a great catalyst toward doing so.

"The representation of terrain in modeling and simulation and training systems is vitally important and we really haven't gotten it right yet as a nation," said Keith Masback, USGIF president. "We're hoping that we can use our platform at USGIF to bring everybody together and get this right. This has been a longtime challenge for the nation."

Michael Macedonia, chief technologist for operations, simulation and training operations at SAIC and the former CTO for the U.S. Army Program Executive Office for Simulation, Training and Instru-

The use of all simulations is all about trying to predict and understand the future. We're in the era where people are using this large data set called geo to be able to help predict the future and prepare warfighters. — Michael Macedonia, SAIC

mentation (PEO STRI), said the use of geospatial data in simulations is becoming more prevalent. Geospatial information enhances the training experience, particularly when it comes to using simulations in a predictive manner, he said.

"The use of all simulations is all about trying to predict and understand the future," Macedonia said. "We're in the era where people are using this large data set called geo to be able to help predict the future and prepare warfighters."

Macedonia said he is witnessing a convergence of ideas between the science and technology community and the intelligence and geospatial data communities.

"It's an exciting time right now, because you combine big data with predictive analysis and geospatial data in simulation and suddenly you've got the new killer app in the 21st century for geospatial data."



RENDERING COURTESY OF SAIC

Macedonia's Orlando-based team won a contract last year to develop geospatial databases for PEO STRI's Synthetic Environment (SE) Core program, which aims to develop a common environment for all Army simulations, including a standard terrain database generation process.

John Womack, assistant project manager for SE CORE at PEO STRI, also based in Orlando, said the connection between the GEOINT and M&S communities is growing as simulations continue to include more realistic visual scenes of geospecific areas.

"In the past, training simulators using visual displays were satisfied with generic rendering of terrain and scenes," Womack said. "Today we receive very specific requirements about areas needed for training. The GEOINT Community is critical to my program being able to meet those more demanding requirements."

Womack will be attending the symposium on behalf of PEO STRI.

"The GEOINT Symposium allows communities to come together and explore new ways to improve products or make the product more efficient," he added.

USGIF will also hold the first official meeting of its new Modeling and Simulation Geospatial Working Group at the symposium. The meeting will take place Wednesday from 12:15 to 2:15 p.m. in Sun Ballroom 1-3.

The working group's mission is to facilitate information exchange across the two communities and identify opportunities for improved interoperability of geospatial data for M&S users.

The focus for this first M&S working group meeting is to discuss cost saving opportunities that might be gained from improved efficiency in generating geospatial data, as well as some of the technical impediments to achieving the efficiencies and interoperability envisioned, according to Daniel Maxwell, co-chair of the working group and president of KaDSci. There will also be a discussion period for interested members to identify challenges and opportunities for the group.

"Because the GEOINT Community generates much of the data that is supplied to simulations, collaboration between the communities is essential," Maxwell said. ■

Download the Official GEOINT Symposium App



Download the **GEOINT 2012** show app to your device through the iTunes and Android app stores  

- Interactive floor plan and exhibitor listings
- Speaker Biographies
- Symposium Agenda
- Breaking News Updates
- Location Information
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Also download the Digimarc Discover app to experience our Living Event Guide. Find out more on page 4 of the GEOINT 2012 Event Guide.

**MONDAY OCTOBER 8****8:00 A.M. Shotgun Start****ALLDER GOLF CLASSIC**

Grand Cypress Golf Club, Orlando, FL

***Buses depart at 6:30 A.M. from the Gaylord Palms and Caribe Royale*

GEOINT FOREWORD Program**8:00 A.M. - 8:15 A.M.****GEOINT Foreword Welcome**

Sun Ballroom A-B

Dr. Jim Ellsworth, Chief Performance Officer, USGIF

8:15 A.M. - 8:45 A.M.**Keynote****20/20 GEOINT**

Sun Ballroom A-B

Ted Cope, Director, Basic and Applied Research, National Geospatial-Intelligence Agency (NGA)

8:45 A.M. - 9:15 A.M.**Networking Break****9:15 A.M. - 10:45 A.M.****PANEL****Open Source Software: Increasing Access and Decreasing Costs**

Sun Ballroom D

Software is slowly becoming a commodity, via increased use of Open Source Software (OSS). This session will detail some of the tactical uses of OSS both inside private industry and inside the government GEOINT domain—where agencies from the Army Corps of Engineers to NSA to NGA have discovered the practical benefits of OSS, and how adopting an open strategy can better meet the needs of their stakeholders and address the realities of declining budgets. Panelists will review the architecture of open and what OSS tools & applications are in use within the GEOINT market, and will discuss benefits, pitfalls, and military use cases for OSS.

Moderator – Roger Yee, Vice President, BRTRC

Panelists

- Lt Col Christopher Quaid, U.S. Air Force, Chief, Applied TECHINT, NRO
- Ben Tuttle, Ph.D., Project Scientist & GIAT Apps Team Lead, NGA/Innovision
- Jason Kahn, Program Manager, IC Applications Mall, NSA
- Robert Ellis, Software Engineering Lead, DCGS-MC INC 1, U.S. Navy
- Ollie Guinan, Vice President, Ground Systems, Skybox
- Joel Schlagel, Physical Scientist, U.S. Army Corps of Engineers

PANEL**Human Geography Data Collection**

Sun Ballroom C

Hollow tools with incomplete data can't help the decision maker: collecting the data to drive Human Geography analysis remains a challenge. Can the Human Geography data collection process be streamlined, and more easily trained? This session will provide a snapshot of both proven and evolving data collection techniques that leverage mobile devices. Panelists will address how the data can be collected and loaded from anywhere, anytime. In addition, panel experts will discuss data integrity, backed by proven theory and grounded in unique case studies.

Moderator – Bruce Heinlein, Director, HG Joint Program Office, NGA

Panelists

- Tony Quartararo, President & CEO, Spatial Networks
- Mark Polyak, Director, Analytic Strategy, Courage Services
- Liz Lyon, U.S. Army Corps of Engineers
- Clint Watts, Consultant, Navanti Group
- Sam Striker, Social Scientist, Hollin-Phoenix

10:45 A.M. - 11:15 A.M.**Networking Break****11:15 A.M. - 12:45 P.M.****PANEL****Open Source Software Can't Do Everything ... Yet**

Sun Ballroom D

Open Source Software (OSS) has moved from being a backroom, developers-only domain to a frontline component inside key military capabilities. OSS isn't doing everything—yet—but it is slowly commoditizing key strategic parts of geospatial infrastructure, from operating systems to databases to applications. In this session, key government program managers will discuss where and how they see OSS moving to solve warfighter needs, as well as assess the gaps in OSS investment and capabilities.

Moderator – John Scott, Senior Systems Engineer & Open Tech Lead, RadiantBlue

2012 SYMPOSIUM AGENDA

Panelists

- John Snevely, DCGS Enterprise Steering Group Chair
- Col Stephen Hoogasian, U.S. Air Force, Program Manager, NRO
- Keith Barber, Senior Advisor, Agile Acquisition Strategic Initiative, NGA
- John Marshall, Chief Technology Officer, J2, Joint Staff
- Dan Risacher, Developer Advocate, Office of the Chief Information Officer, DoD
- Josh Campbell, GIS Architect, Office of the Geographer & Global Issues, State Department

PANEL

Human Geography Data Storage

Sun Ballroom C

The research, analytic, and operations communities have been searching for ways to efficiently and effectively store and access Human Geography data. To fully grasp the nature of any data stored and coded spatially, it is critical to understand the relationship between the stored data and the real world it depicts. Consequently, Human Geography data storage is not susceptible to a one size fits all solution, comprising instead a complex, interwoven tapestry of theory, technology, innovation, and lessons learned. This session brings together a diverse panel of experts to address the components of storing Human Geography information, presenting a series of challenges to inspire the audience to further innovate, extend existing platforms, and learn from the past.

Moderator – Justin Poole, Deputy Director, Online GEOINT Services (OGS)

Panelists

- Al DiLeonardo, President & CEO, HumanGEO
- Brian Doyle, Geographic Intelligence Analyst, USCENTCOM
- Dr. Brian Efird, Senior Research Scientist, NDU/Center for Technology & National Security Policy
- Tara Genkinger, Human Terrain Analyst, Skope, USSOCOM
- Jason Patti, Principal Analyst, Courage Services

12:45 P.M. - 2:00 P.M.

Lunch Keynote

Sun Ballroom A-B

Jeff Jonas, IBM Fellow, Chief Scientist, IBM Entity Analytics

2:00 P.M. - 3:30 P.M.

PANEL

Gaming Technologies for GEOINT

Sun Ballroom D

This session brings together forward thinkers across academia, industry, and government to discuss the innovative uses of gaming technologies in GEOINT. Leading off with four, 15-minute talks, it will conclude with a panel discussion of use cases exploring creative employment of gaming in pursuit of better intelligence. The goal of this session is to broaden the audience's awareness

far beyond the popular understanding of the term "gaming," and to highlight the wide range of national security and intelligence applications of these technologies and methods. The session will introduce technical and research programs in these areas, and explore how they might impact the evolution of the intelligence process in government, developer, and learning contexts.

Moderators

- Mike Campanelli, Senior Systems Engineer, RadiantBlue Technologies
- Jack Greenspan, Senior Associate, Booz Allen Hamilton
- Dr. Karen Kemp, Professor of Practice, Spatial Sciences, University of Southern California

Panelists

- Dr. Ola Ahlqvist, Associate Professor, Ohio State University
- Dr. Joeanna Arthur, Project Scientist, Basic & Applied Research, NGA
- Klee Dienes, President, Hadron Industries
- Stacy Lovell Pfautz, Senior Scientist, Aptima
- John VonBokel, Software Engineer, Booz Allen Hamilton

PANEL

GEOINT Lessons Learned from the Arab Spring

Sun Ballroom C

This session engages a conversation on existing and missing technologies and analytic approaches for understanding the space/time progression of sociocultural events that occurred across the Arab world beginning in December 2010. Federal officials will share viewpoints on the national security issues needing to be considered, suggesting priorities for research and development; academics will discuss relevant research showing promise for addressing these issues, and industry representatives will describe current practices for approaching these and similar national security challenges. Session Q&A will offer attendees the opportunity to discuss identified needs, and explore possible connections between academia and industry to close those gaps.

Moderator – Dr. May Yuan, Professor and Director, Center for Spatial Analysis, University of Oklahoma

Panelists

- Eric Nischan, Chief, Research & Analysis, OSC Geospatial Service Program
- Dr. Philip Schrodtt, Professor of Political Science, Pennsylvania State University
- Dr. Kathleen Carley, Professor of Computer Science and Director, Center for Computational Analysis of Social & Organizational Systems, Carnegie Mellon University
- Barry Costa, Senior Principal Engineer, The MITRE Corporation
- Marissa Allison, Senior Consultant, Booz Allen Hamilton



» GEOINT 2012 SYMPOSIUM AGENDA

3:30 P.M. - 4:00 P.M.

Networking Break

4:00 P.M. - 5:00 P.M.

GEOINTstant (Lightning Talks)

Sun Ballroom A-B

Join some of GEOINT's most innovative minds for these fun, fast-paced talks on the trends and technologies facing our profession. Each talk lasts five minutes, giving participants just enough time to energize their minds on topics of interest, before two hours of free time to pursue any conversations that interest you in a more sociable environment!

Moderator – Mike Howard, Vice President, SSE Business Unit, QinetiQ

Speakers and Topics

- George Menhorn, GTRI, "Embracing New Technologies in FalconView"
- Will LaForest, 10gen Federal, "Scaling for Geospatial Big Data"

- Chris Tucker, Yale House Ventures, "MapStory: Demystifying the Power of Geographic Visualization"
- Chris Rasmussen, NGA, "The Limits of Informal Collaboration & Why Changing the Official Process Matters"
- Todd Bacastow, Pennsylvania State University, "GEOINT's Holy Grail"
- Jon Estridge, NGA, "Mission Benefits of the Cloud"
- Sue Kalweit, Booz Allen Hamilton, "GEOINT Certification Implications for Industry"
- Stewart Bruce, Washington College, "Virtual Worlds and 3D Visualization"
- Jason Dalton, GeoEye, "Cloud Analytics"

7:00 P.M. - 10:00 P.M.

Networking Event

GEOINT 2012 Havana Nights Welcome Reception:

Remembering the Cuban Missile Crisis

Gaylord Palms Coquina Lawn and Wreckers Sports Bar

» TUESDAY OCTOBER 9 AT-A-GLANCE

8:00am-8:15am	PRESENTATION AND POSTING OF THE COLORS [Osceola Ballroom C-D]
8:15am-8:45am	WELCOME – K. Stuart Shea, Chairman and CEO, United States Geospatial Intelligence Foundation (USGIF); and Chief Operating Officer, SAIC [Osceola Ballroom C-D]
8:45am-9:00am	MASTER OF CEREMONIES – The Honorable Joan Avalyn Dempsey, USGIF Board of Directors; and Senior Vice President, Booz Allen Hamilton [Osceola Ballroom C-D]
9:00am-9:45am	KEYNOTE – The Honorable James R. Clapper Jr., Director of National Intelligence (DNI) [Osceola Ballroom C-D]
9:45am-10:45am	PANEL – Defense, Intelligence and Homeland Security Information Innovation [Osceola Ballroom C-D] <ul style="list-style-type: none"> • Teresa Takai, Chief Information Officer, Department of Defense (DOD) • Al Tarasiuk, Chief Information Officer, Office of the Director of National Intelligence (ODNI)
10:45am-11:15am	NETWORKING BREAK
11:00am-6:00pm	EXHIBIT HALL OPEN
11:15am-12:00pm	KEYNOTE – Letitia A. Long, Director, National Geospatial-Intelligence Agency (NGA) [Osceola Ballroom C-D]
12:00pm-2:00pm	LUNCH [Exhibit Hall and Sun Ballroom A-B]
1:00pm-2:00pm	LUNCHTIME ROUNDTABLE – The NGA Strategy [Innovation Pavilion, Booth #2003 Exhibit Hall]
2:30pm-4:00pm	BREAKOUT SESSION – Geospatial Interoperability: The Basis for Shared Information and Investments [Osceola Ballroom A] BREAKOUT SESSION – Confronting Complexity in Global Disasters [Osceola Ballroom B]
2:30pm-4:00pm	INTEROPERABILITY TECH TALKS [Innovation Pavilion, Booth #2003 Exhibit Hall]
4:00pm-6:00pm	EXHIBIT HALL NETWORKING RECEPTION



SMALL BUSINESS ADVISORY WORKING GROUP

INVITES YOU TO A SMALL BUSINESS RECEPTION
Tuesday, OCT. 9 | 4:30-5:30 p.m. | USGIF Booth #801

Are you looking to meet Small Business partners, Prime Contracting partners, or Government and Military officials supporting small business programs? Stop by the USGIF Small Business Reception to create new connections and to discover the Innovation Advantage of Small Business!

**Government Agency
Acquisition and Small
Business Program Officials**

**Military Acquisition
and Small Business
Program Officials**

**Prime Contractors
looking for Small
Business Partners**

Small Business representatives

**DROP OFF A BUSINESS CARD FOR A CHANCE
TO WIN A NEW iPad WITH RETINA DISPLAY!**

All GEOINT 2012 Attendees are welcome! Stop by booth #801 from 4:30pm to 5:30pm on Oct. 9!
RSVP not required but appreciated: smallbusiness@usgif.org



INNOVATION ADVANTAGE

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